

**Abstract**

A system and method for caching and rendering an image database enables predictive loading of unrequested portions of the image. A raw image is preprocessed 5 and subdivided into tiles. As a portion of a raw image is displayed on a screen and the user zooms and pans the image, a predicting algorithm determines which additional tiles should be loaded into cache so that the user suffers no lag time as additional tiles not in cache are loaded. The present system and method is adaptable to both raster and vector images.